and be able to render assistance in that great service of removing *doubtful knowledge.* Such knowledge is the early morning light of every advancing science, and is essential to its development; but the man who is engaged in dispelling that which is deceptive in it, and revealing more clearly that which is true, is as useful in his place^ and as necessary to the general progress of the science,, as he who first broke througli the intellectual darkness, and opened a path into knowledge before unknown to man.

612. The identity of the force constituting the voltaic current or electrolytic agent, with that which holds the elements of electrolytes together (590),, or in other words with chemical affinity, seemed to indicate that the electricity of the pile itself was merely a mode of exertion, or exhibition, or existence of *true chemical action,* or rather of its cause; and I have consequently already said that I agree with those who believe that the *supply* of electricity is due to chemical powers (592).

613. But the great question of whether it is originally due to metallic contact or to chemical action, *i.e.* whether it is the first or the second which *originates* and determines the current, was to me still doubtful; and the beautiful and simple experiment with amalgamated zinc and platina, which I have described minutely as to its results (598, etc.), did not decide the point; for in that experiment the chemical action does not take place without the contact of the metals, and the metallic contact is inefficient without the chemical action. Hence either might be looked upon as the *determining* cause of the current.

614. I thought it essential to decide this question by the simplest possible forms of apparatus and experiment, that no fallacy might be inadvertently admitted. The well-known difficulty of effecting decomposition by a single pair of plates, except in the fluid exciting. them into action (598), seemed to throw insurmountable obstruction in the way of such experiments; but I remembered the easy decomposability of the solution of iodide of potassium (52), and seeing no theoretical reason, if metallic contact was not *essential,* why true electrodecomposition should not be obtained without it, even in a single circuit, I persevered and succeeded.

615. A plate of zinc, about eight inches long and half an inch wide, was cleaned and bent in the middle to a right angle, fig- 33? #• A plate of platina, about three inches long and half an inch wide, was fastened to a platina wire, and the latter bent as in the figure, *b.* These two pieces of metal were arranged together as delineated, but as yet without the vessel *c,* and